

REMARKS

Claims 1-7 currently appear in this application. The Office Action of June 4, 2007, has been carefully studied. These claims define novel and unobvious subject matter under Sections 102 and 103 of 35 U.S.C., and therefore should be allowed. Applicant respectfully requests favorable reconsideration, entry of the present amendment, and formal allowance of the claims.

Rejections under 35 U.S.C. 112

Claims 1-6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement.

This rejection is respectfully traversed.

Claims 1-3 and 6 have been amended in order better to describe and define the invention for which patent protection is sought. It should be noted that the presently claimed method is an improvement over conventional SERS analytical methods.

Page 7, lines 4-7, has been deleted from the specification.

The present method is an improvement on SERS assay methods described in the literature since 1980. It should be noted that the present specification discusses the limitations of conventional SERS at page 4, paragraphs [0010] and [0011].

Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

This rejection is respectfully traversed.

Claim 1 recites placing an active metal sensor into a solution, and then monitoring the electroposition current density in a galvanodynamic regime of the electrodeposition at the equilibrium potential of the active metal in an active metal solution. It is clear that the sensor is placed into the sample.

The porosity relates to the porosity of the porosity of the synchronous detection mode.

Claim 6 has been amended to recite use of the interference polarizing filter.

Art Rejections

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tian et al., *Applied spectroscopy* 1996 or *Journal of Electroanalytical Chemistry and Interfacial Electrochemistry*, 1991, hereinafter Tian '96 and Tian '91, respectively, or Pothier in view of Dorain.

This rejection is respectfully traversed. All of the cited articles relate to the application of modulation methods in SERS techniques. All of these publications describe methods that modulate an electrode potential when the potential's variation amplitudes are rather large. As is known, this results in extremely uncertain and unstable changes in both large-scale (up to hundreds of nanometers) silver surface patterns, and in silver adatoms concentration on the electrode surface, in which case it is nearly impossible to obtain reproducible analytical data.


The two Tian publications relate to potential averaged enhanced Raman spectroscopy. There is nothing in Pothier relating to normalization of the spectra obtained. Dorain teaches normalization of the spectra, but does not teach galvanodynamic SERS modulation.

What the present inventors have discovered, and what is claimed in claim 1, is that modulation of the electrodeposition current of the metal, *e.*, silver, electrode, results solely in oscillations of silver adatoms concentration. This particular effect is thus applied to analysis methodology based upon galvanodynamic rather than potentiodynamic SERS modulation. This is neither disclosed nor suggested in any of the cited articles.

It is noted that the prior art made of record and not relied upon is merely considered to be pertinent to applicant's disclosure.

Respectfully submitted,

BROWDY AND NEIMARK, P.L.L.C.
Attorneys for Applicant

By 
Anne M. Kornbau
Registration No. 25,884

AMK:
Telephone No.: (202) 628-5197
Facsimile No.: (202) 737-3528
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